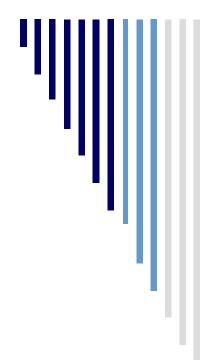
Guastella Associates, LLC



Kiawah River Utility Company

Initial Rate Study

May 2019

...SERVING REGULATED AND UNREGULATED WATER AND WASTEWATER UTILITIES SINCE 1978

GUASTELLA ASSOCIATES, LLC

UTILITY MANAGEMENT • VALUATION • RATE CONSULTANTS

725 Highway A1A Suite B103 Jupiter, FL 33477 (561) 747-9867

May 23, 2019

Mr. Kevin O'Neill Vice President, Development Kiawah River Investment, LLC 211 King Street, Suite 300 Charleston, SC 29401

Dear Mr. O'Neill:

As requested, we have prepared an initial rate study for recovery of the costs of the wastewater collection and treatment service to be provided by Kiawah River Utility Company ("Company" or "Utility"). The study is based on a "complete system analysis" that is an appropriate utility rate setting methodology for a utility created to serve the newly developed real estate project in Charleston County, South Carolina.

This report explains the rate setting methodology and principles used to establish the cost of providing service and resultant rates, as well as the costs to be absorbed by the Utility's parent, Kiawah River Utility Holdings, LLC. The calculation of the revenue requirement is summarized in detailed schedules that reflect the total operating expenses and capital costs, and the portions used to determine the rates.

We are available to assist in the preparation of an initial rate application to the S.C. Public Service Commission, and participate in the anticipated examination by the Office of Regulatory Staff. A statement of qualifications and experience is provided in Appendix C.

Respectfully submitted,

GUASTELLA ASSOCIATES, LLC

John F. Guastella President

Kiawah River Utility Company

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INTRODUCTION

General Formation

The Kiawah River development project is located in Charleston County, South Carolina on Johns Island. The property is roughly bounded by the Johns Island County Park and Mullet Hall Equestrian Center to the north, the Kiawah River to the south, Briar's Creek Golf Club to the east and Kiawah River Estates to the west. Kiawah River is located approximately 20 miles from downtown Charleston, and approximately 4 miles from Kiawah Island, the location of a popular resort and golf course community. The utility system is expected to be constructed in four phases over a 20-year period in order to meet growth projections of the development.

The current zoning for the development site is designated as a Planned Development under a Development Agreement and Planned District Plan approved by the Charleston County Council. The proposed mixed-use community may include up to 1,285 homes; a combination of hotels, inns and/or villas totaling up to 450 guest rooms, and 80,000 square feet of retail and/or office uses. The entire development area is approximately 2,000 acres with over 1,000 highland acres. Buildout of the development area is expected to begin in 2019 and not reach full buildout for up to 20 years. A map of the proposed service area and surrounding communities is provided as Appendix A.

Kiawah River Utility Company ("Company" or "Utility") has been formed as a private utility to own and operate the wastewater system to serve the Kiawah River

development. The Company is subject to economic regulation by the South Carolina Public Service Commission ("PSC") and the Office of Regulatory Staff ("ORS"), and environmental regulation by the Department of Health and Environmental Control ("DHEC"). Operation, maintenance and management of the system will be contracted with a qualified and properly licensed company. The financial management and accounting of the Company's operations will be consistent with the NARUC Uniform System of Accounts.

Description of System

The wastewater will be treated to tertiary level with a membrane bioreactor (MBR) treatment plant. The plant will be installed in four phases, each with a treatment capacity of 110,000 gallons per day (gpd). Disinfection of the permeate (effluent) will consist of an ultraviolet (UV) system. Biosolids will be periodically wasted to a dewatering roll-off container after polymer injection. The roll-off will be hauled to the Oak Ridge Landfill in Dorchester County for ultimate disposal. Emergency power to the plant is being provided by an engine driven generator equipped with an automatic transfer switch.

The treated effluent will be discharged to an effluent pump station from which it will be pumped to an onsite spray field for land application, as approved by SCDHEC by No Discharge Permit ND0088897. A lined lagoon will hold 7-days of treated effluent in the event of inclement weather or high groundwater levels that prevent land application.

The wastewater collection system consists of gravity sewer mains that discharge waste flows to lift stations that ultimately pump the wastewater through force mains to the treatment plant. The collection system will also be constructed in phases during the growth years.

The entire system will be controlled by Supervisory Control and Data Acquisition (SCADA) that will allow remote monitoring and control of the plant, spray field and pump stations.

RATE SETTING METHODOLOGY

The initial rates for sewer service have been predicated on the basis that ultimately the Company will be a sewer utility capable of providing safe and adequate service on the strength of its own financial condition, capable of maintaining financial viability and attracting capital. As a developer-related new utility, however, the initial rates for service must take into consideration that during the growth years there will not be enough customers to generate sufficient revenues to cover the full cost of providing service. Accordingly, advances from associated companies will be required to subsidize the utility operations in terms of both operating expenses and capital costs. The revenue requirement has been calculated to project costs under a "complete system analysis", while implementing a decision to keep the initial rates below the projected complete system costs in order to allow for periodic rate increases that will adjust for unanticipated costs that will certainly vary from current projections during the 20-year growth period.

This method of developing initial rates and structuring a new sewer utility protects the

Company's customers because the risk of the success of the real estate project will be borne by the developer, not the utility or its customers. The customers actually added during the growth years will, in effect, pay through the sewer rates only a pro rata share of the costs, with the affiliated developer subsidizing the utility operating deficits. Although the projected operations through the growth years have been carefully estimated, it is recognized that periodic rate increases will likely be needed, subject to regulatory approval after examination of the reasonableness of unanticipated increases in expenses, taxes and plant additions and replacements. Moreover, under rate setting standards that prohibits retroactive rate setting, the Utility's deficits that will, in effect, be absorbed by the developer will not be recoverable as part of any future utility rate increase, but instead treated as the startup costs of the developer's real estate project.

REVENUE REQUIREMENT

Cost Recovery

The revenue requirement and resultant rates under the complete system analysis are provided in Appendix B, including a Tariff Rate sheet showing the proposed initial rates, and support Schedules A through F that show the anticipated actual operating expense, capital costs and billing analyses, as well as the level of revenues under the initial rates that will require subsidies by the developer. Schedule A sets forth the summary computation of the total annual cost of providing service or "full" revenue requirement for the end of each phase of the four phases of the development. The revenue requirement components include equity return before and after gross up for income taxes, regulatory assessment (on the equity portion), operation and maintenance expenses, depreciation and amortization, taxes other than income taxes (payroll and property taxes), income taxes, interest and regulatory assessments (on the expense portion).

Each revenue requirement component has been calculated to show the projected estimate of costs as currently anticipated, and the results of charging less than fully compensatory initial sewer service rates so that today's customers do not pay for costs that are properly allocable to the real estate project. It is anticipated that any increases in operating expenses and construction costs in the future (due to inflation, operational and construction changes, delays, variances in system characteristics or other unanticipated changes) will require compensatory rate revisions. The likely occurrence of such future events, however, does not alter the compensatory nature of the revenue requirement and appropriateness of the initial rates established in this analysis.

The Tariff Rate sheet shows Service Classification No. 1 containing the proposed initial sewer rates applicable to the various customer classes. The billing analysis used to calculate these rates is shown in Schedule F, which develops initial monthly rates of \$85.00 for Residential and Employee Housing classes, \$56.70 for Lodge Units and Hotel Units (Cottages/Cabins/Townhome), and \$.0567 per square foot of Commercial/Retail classes and Recreational Facilities space. The rates among classes are calculated on the basis of relative estimate wastewater flows. Schedule F also shows the rates that would cover the full cost of service at the end of each of the four phases. Note for example that instead of the initial monthly Residential rate of \$85.00, if established at the fully estimated costs at the end of Phase 1, the rate would be \$862.43 and at the end of Phase 2 the rate would be \$344.64 and at the end of Phase 3 the rate would be \$264.16 and then at the end of Phase 4 or at Buildout the rate would be \$236.02. The steady decline in rates over the years reflects the impact of customer growth. It is also noted that instead of proposing the initial rates at the Phase 4 or Buildout levels, it is our judgement that changes in costs and other potential factors for now unanticipated changes would be better addressed with possible periodic rate revisions in the future subject to regulatory approval.

The Tariff Rate sheet also shows the one-time Connection Fees to be charged when each customer begins taking service, at a level of \$4,500 per equivalent residential unit ("ERU"). The \$4,500 is based on the original cost of about half of the sewer collection system, divided by the total number of ERUs. For rate setting purposes, connection fees are treated as

customer contributions in aid of construction ("CIAC") or a cost-free source of capital that are deductions to rate base so that no return and no depreciation expense is allowed in rate recovery. Accordingly, connection fees are an up-front payment for sewer service because they offset the level of general rates.

Schedule A.1 provides the revenue requirement or full cost recovery calculation for each phase. The details of each component are provided in subsequent schedules. The revenue requirement at the projected full cost ranges from \$1,945,632 at the end of Phase 1 to \$4,112,672 at the Buildout (Phase 4). These revenue requirements have been determined on the basis of a rate base/rate of return analysis. The resultant Operating Margins, by phase, are also shown for information purposes, which are at the upper end of Operating Margins that are provided in Schedule A.2, again only for information purposes since the rates are based on a rate base/rate of return analysis. The bottom of this schedule shows the revenues that would be generated by the proposed initial sewer rates and the revenue requirement needed to achieve full cost recovery for each phase. The difference represents the Developer's Subsidy for the last year of each phase – keeping in mind that the developer will be subsidizing each interim year as well and, therefore, it will be considerably higher than only the amounts for the four years shown. It is worth repeating that the amounts the developer absorbs or subsidizes cannot be recovered through future rate increases because recovery of past losses is prohibited under established retroactive rate setting principles.

Rate Base

Schedule B sets forth the computation of the Company's rate base for each phase of the development. The utility plant in service, by primary plant account, is provided in Schedule B.2, which shows the original cost of the utility plant to be added during each phase, and also shows the deductions for CIAC. At buildout, the original cost of utility plant in service is projected to be \$32,718,600 and CIAC of \$6,534,450, or a net utility plant rate base component of \$26,184,150. The accumulated depreciation is shown in Schedule B.3 along with the amortized amount of CIAC. At buildout, the accumulated depreciation is projected to be

\$13,312,053 and the amortization of CIAC in the amount of \$2,557,420, or a net accumulated depreciation rate base component of \$10,754,633. There are two additions to the rate base investment, as shown on Schedule B.2. one is for working capital to reflect the lag between billing and collecting under monthly billing, and the other for the average cost of replacement of membrane elements in the later years of operations.

Operating Statement

Schedule C contains an income statement for the year-end of each phase of the development, reflecting revenues that would be generated by applying the proposed initial rates to the billing units for each class of customer that are projected to be connected at the time of each phase. The operating expenses are at the projected level, as is the rate base. The resultant rates of return for all phases are negative, indicating the extent of the costs that will be absorbed by the developer under the proposed initial rates. As the development progresses and actual costs become known, subsequent rate applications will result in rates and revenues that generate a reasonable return on investment at buildout.

Operating Expenses

Schedule C.1 contains a line item detailed summary of Operation and Maintenance Expenses for each phase. The Operation and Maintenance Expenses were projected on the basis of estimates and information for this specific system provided by the developer's representatives and other consultants, as well as this firm's experience. Schedule C.2 contains the Depreciation expense by primary plant account for each phase, exclusive of the amortization of CIAC. The average service lives and depreciation rates used are based on judgment and a range of comparable data. Schedule C.3 contains an adjustment to reflect income taxes, but the calculations only result in the minimum state tax because the initial rate revenues do not generate sufficient regulatory taxable income during the growth years.

Capital Structure and Rate of Return

Schedule D contains the calculation of a capital structure and resultant rate of return for each phase. Although the source of funding for the utility system will be Advances from Associated Companies – a new utility cannot attract debt capital on the strength of its own financial condition — for rate setting purposes an estimated 50/50 debt/equity ratio was targeted. The imputation of debt produces a lower rate of return and provides an interest deduction for future income tax determinations for rate setting. The debt component was estimate by assuming a portion of debt at the beginning of each phase, to which an amortization schedule was calculated in order to determine the debt balance of the total capital. The total capital is "synchronized" to the level of rate base at the end of each phase. The interest rate of 6.19% is based on information regarding the developer's financing experience. The equity return is estimated on the basis of recently allowed rates of return on equity. The weighted rate of return or cost of capital ranges from 7.8% to 7.9%. The full cost revenue requirement, as reflected in Schedule A.1, is based on achieving that overall rate of return.

RATE STRUCTURE

The rate structure for general sewer service consists of flat monthly rates for the various customer classes, to be billed in advance, as shown Phases 1, 2, 3 and 4 (buildout) on Schedules E.1, E.2, E.3 and E.4, respectively. Each schedule shows, by class of customer, the monthly bills at the end of each phase, the initial rates and the annual revenues. The rates vary among the customer classes according to relative flows: see Schedule F which contains the calculations of the initial rates as well as the rates that would generate full cost recovery.

CONCLUSION

The proposed initial rates are based on a detailed rate analysis of the Company's cost of providing service or revenue requirement, and are designed only to cover the proportionate share of the cost of providing sewer service. The affiliated developer's subsidies through advance or paid in capital to the Company will pay for unrecovered utility costs during the growth years and, therefore, treated as costs attributable to the creation of a real estate project. It is anticipated that periodic rate revisions, subject to regulatory approval, will enable the Company to reach fully compensatory rates at or close to buildout. This planning of the Company's operations as to rates and charges is intended to create a financially sound sewer utility that will provide safe and adequate service, that will have revenue sufficient to cover its reasonable cost of operations, and that will be capable of continuing as a viable utility after the development project is complete.

Respectfully submitted,

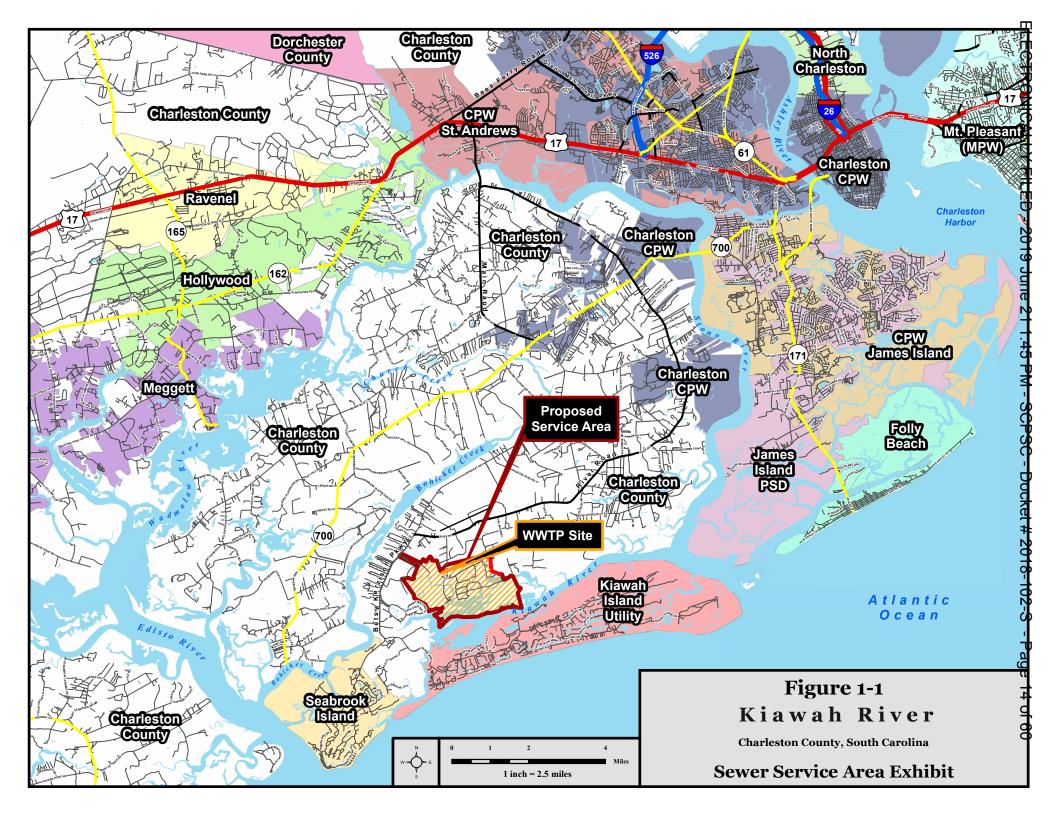
GUASTELLA ASSOCIATES, LLC

John F. Guastella, President

Cuthite

Gary C. White, Vice President

APPENDIX A



Appendix B

Kiawah River Utility Company Wastewater System

Schedules in Support of the Utility's Initial Rates

Based on a Complete System Analysis

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Tariff Rates

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KIAWAH RIVER UTILITY COMPANY

SCHEDULE

FOR

SEWER SERVICE

APPLICABLE

IN

"KIAWAH RIVER"

CHARLESTON COUNTY, SOUTH CAROLINA

	Original Leaf No. 2
	Revised Leaf No
Superseding	Revised Leaf No

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Kiawah River Utility Company.		Original Leaf No. 3
		Revised Leaf No
	Superseding	Revised Leaf No

GENERAL INFORMATION

1. Territory

"Kiawah River" Development – Mixed Use Residential/Resort Community

CHARLESTON COUNTY, SOUTH CAROLINA

2. Application for Sewer Service

Application for service will be required in accordance to South Carolina Code of Regulations 103-534.

3. <u>Deposits</u>

Deposits will be required in accordance to South Carolina Code of Regulations 103-531, 103-531.1, 103-531.2, 103-531.3, 103-531.4, 103-531.5, 103-531.6, 103-531.7.

4. General Rules

- A. Customers must provide 10 days' written notice prior to the date on which termination of service is requested or prior to a change of occupancy, until which date the customer will be responsible for payment of service.
- B. The Company shall not be liable for any damage or expense resulting from leaks, stoppages or defective plumbing or from any other cause occurring to any premises, or within any house or buildings; and it is expressly stipulated by and between the Company and the Customer that no claims shall be made against the said Company on account of the breaking, stoppage or any damage or expense to any service lines on said property, when the cause thereof is found to be in that part of the service line lying on said property.
- C. The Company will not be liable for any claim or damage arising from a deficiency of service or discontinuance of service, the breaking of machinery or other facilities, or for any other cause. The Company reserves the right to rescind service whenever the public welfare may require it.
- D. The company may shut off sewer in its mains to make repairs and extensions. Where possible, proper advance notice will be made to customers affected.
- E. All leaks in consumer's service line and fixtures must be repaired promptly and by and at the expense of the consumer. After failure to repair leaks within five (5) days after notice to do so, the Company reserves the right to shut off consumer's service. The Company will not restore the service until all needed repairs have been made and until all charges incurred by the Company in shutting off and restoring the service have been paid.
- F. There must be a separate service for each premises or unit.
- G. Installation of service pipes and mains will not normally be made during prohibitive weather conditions.

Kiawah River Utility Company.		Original Leaf No. 4
		Revised Leaf No
	Superseding	Revised Leaf No

GENERAL INFORMATION

- H. The customer is responsible for service pipes and plumbing within the property line. Any plumbing work done on the customer's service pipe is subject to approval by the company. No underground work shall be covered up until it has been inspected and approved by the company.
- I. All mains, services (up to the property line) and other sewer system facilities will be maintained and replaced by the company.
- J. The Company Sewerage System is meant to provide sanitary collection and final disposal of domestic sewage and certain types wastes amenable to disposal in the Company's facilities. The Company reserves the right of approval of all wastes to be discharged to its system in specific conditions contained in Permits issued to the Company by environmental regulatory authorities.
- K. Where an applicant is seeking service at an elevation or gradient which could not otherwise be adequately serviced by existing plant, the company will require that the applicant bear the additional cost of providing such extraordinary service, or in the alternative, require the applicant to purchase, install and maintain the necessary special equipment, such as a lift pumping system, needed to serve the premises.
- L. Customers must permit company representatives to enter their premises on reasonable request for purposes relating to the operation and maintenance of the company's system, including inspection of the customer's and the company's facilities, and terminating and restoring service.
- M. No person shall maliciously, willfully or negligently damage, destroy, uncover, deface, block access to or tamper with any pipe, valve, structure, appurtenance or equipment which is a part of the sewer works system.
- N. The Company reserves the right to change or amend, from time to time, these Rules, Regulations and Rates, in accordance with law.
- O. No officer or employee of the Company can vary these Rules without action of the Board of Directors, and no agent or employee of the Company can bind it by any agreement or representation except when authorized in writing by an executive officer of the Company to do so.

5. Extension of Mains

Mains will be extended at the discretion of the Company.

6. Discontinuance of Service - Non-Payment

Service may be discontinued in accordance with South Carolina Code of Regulations 103-535, 103-535.1, 103-536.

Kiawah River Utility Company.		Original Leaf No. 5
		Revised Leaf No
	Superseding	Revised Leaf No

GENERAL INFORMATION

7. <u>Discontinuance of Service - Other</u>

- A. Service rendered under any application, contract or agreement may be discontinued by the company after reasonable notice for any of the following reasons:
 - (1) For non-authorized use of the sewer system.
 - (2) For failure to protect and maintain the service pipe or fixtures on the property of the customer in a condition satisfactory to the company.
 - (3) For tampering with any connections, service pipe, curb cock, seal or any other appliance of the company controlling or regulating the customer's sewer service facilities.
 - (4) For failure to provide the company's employees reasonable access to the premises supplied, or for obstructing the way of ingress to any appliances controlling or regulating the customer's sewer service.
 - (5) In case of vacancy of the premises.
 - (6) For violation of any rule or regulation of the company, provided such violation affects the reliability or integrity of the sewer system.
- B. Written notice of discontinuance of service shall contain the information as to the reason for discontinuance and will be given except in those instances where a public health hazard exists.
- C. The company may, at any time, temporarily discontinue sewer service in case of accident, or for the purpose of making connections, alterations, repairs, changes, etc.
- D. Except as stated in the preceding paragraph, or in the case of a violation that threatens the integrity of the sewer system, the company shall not discontinue service to any customer on a Friday, Saturday, Sunday, Public Holiday or on a day when the company is not open for business. Public Holiday shall refer to those holidays defined in the General Construction Law.

8. <u>Restoration of Service</u>

Restoration of service will be provided in accordance to South Carolina Code of Regulations 103-532.4.

Kiawah River Utility Company.		Original Leaf No. 6
		Revised Leaf No
	Superseding	Revised Leaf No

SERVICE CLASSIFICATION NO. 1

Applicable to use of Service for:

Residential and General Service use.

Character of Service:

Continuous.

Monthly Flat Rates and Connection Fees:

General Service Customer Group	Monthly <u>Rate per Unit</u>	Monthly <u>Rate per Sq. Ftg.</u>	Connection Fee <u>per Unit</u>	Connection Fee _per Sq. Ftg.
Residential	\$ 85.00		\$4,500.00	
Workforce Housing	\$ 85.00		\$4,500.00	
Lodge Units	\$ 56.70		\$3,000.00	
Hotel Units	\$ 56.70		\$3,000.00	
Commercial		\$0.0567		\$3.00
Recreation Facilities		\$0.0567		\$3.00

Terms of Payment:

The above rate flat charges shall be rendered monthly in advance and are due and payable upon receipt. Bills not paid within 30 days of mailing are delinquent and the late payment charge becomes applicable. Service may be discontinued after proper notice, as identified herein.

The above connection fee is a one-time charge payable upon the initial connection to the Utility system.

Late Payment Charge:

A late payment charge to be computed at the rate of 1 1/2 percent per month, compounded monthly, may be applied to all balances left unpaid 30 days following mailing of the bill.

Term:

Service is terminable at the customer's request by written or oral notice to the company. The Utility shall have a reasonable period of time after the receipt of notice to terminate service.

Service may be discontinued by the Utility for non-payment. The Utility must give 30 days' notice by certified mail and at the expiration of the 30 days will provide a second notice advising the customer that service will be terminated after 10 days.

Kiawah River Utility Company.		Original Leaf No. 7
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	Superseding	Revised Leaf No

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Kiawah River Utility Company

Revenue Requirement - Full Cost Recovery

		PHASE 1	PHASE 2	PHASE 3	Build-Out <u>⊞</u>
	•				
Equity Return		\$447,474	\$542,962	\$699,596	\$779,251 <u>N</u>
Regulatory Assessment	0.6315%	3,789	4,598	5,924	6,599
Effective Income Tax Rate	24.9500%	148,761	180,505	232,577	259,058 [©]
Equity Grossed-Up	25.4239%	600,024	728,065	938,098	1,044,908
					1e
O&M Expenses		379,735	552,319	846,854	1,201,195 🔼
Depreciation		295,563	410,227	589,539	803,063 🔼
Amortization		20,000	22,000	40,656	84,909 🗜
Property Taxes		368,475	479,175	551,275	495,775
Interest Expense		273,337	368,958	435,089	<u>463,449</u> ≥
		1,337,110	1,832,679	2,463,413	3,048,391
Regulatory Assessment		8,498	11,647	15,655	19,373 O
		1,345,608	1,844,326	2,479,068	3,067,764
					SC
Revenue Requirement (Full Co	st Recovery)	\$1,945,632	\$2,572,391	\$3,417,166	\$4,112,672 \frac{1}{2}
		_	_		DC
Rate Base Investment		\$9,126,040	\$11,675,945	\$14,393,066	\$15,689,712 <u>ర</u>
Required Return on Investment		720,811	911,921	1,134,685	1,242,701 6
Rate of Return on Rate Base		7.9%	7.8%	7.9%	7.9% #
					20
Net Income		447,474	542,962	699,596	779,251
Operating Margin		23.00%	21.11%	20.47%	18.95%
					. 02
Initial Rate Revenue		\$191,585	\$634,150	\$1,099,124	\$1,481,166
Revenue at Full Cost Recovery	<u>.</u>	1,945,632	2,572,391	3,417,166	4,112,672
Developer's Subsidy		4 75 4 0 47	4 000 044	0.040.040	0.004.500
		1,754,047	1,938,241	2,318,042	2,631,506 📆

Schedule A.2

Kiawah River Utility Company Wastewater System

Operating Margin Analysis

NAWC 2008 Financial Summary for Investor-Owned Water Utilities Economic Research Program

		Sub Gro	ups
	All	Revenues	South
	Companies	\$1M-\$10M	Region
Total Companies Surveyed	31	9	4
Average Number of Employees	188	16	106
Average Payroll Expense	\$12,318,428	\$861,234	\$5,541,534
Average Payroll / Employee	\$65,524	\$53,827	\$52,279
Average O&M Expenses	\$40,950,049	\$3,196,632	\$15,211,291
Payroll to Total O&M Expense	30.1%	26.9%	36.4%
Average Operating Expenses	\$65,781,443	\$4,461,236	\$23,683,554
Payroll to Operating Expenses	18.7%	19.3%	23.4%
Average Equity Cost Rate	10.070%	8.380%	9.830%
Average Equity Ratio	47.25%	46.67%	47.23%
Average Operating Revenues	\$82,955,587	\$5,200,397	\$29,340,537
Average Net Income	\$10,779,270	\$384,506	\$4,152,276
Operating Margin-Average	12.99%	7.39%	14.15%
Operating Margin-High	24.02%	19.66%	14.99%
Operating Margin-Low	0.18%	2.35%	9.83%

Note:

The surveyed Companies in the South Region were located in: ARK, LA, KY, TX

Schedule B

Kiawah River Utility Company Wastewater System

Rate Base Calculation

	Test Year YE 2019	Additions 2019-2023	Phase 1 - End YE 2023	Additions 2024-2028	Phase 2 - End YE 2028	Additions 2029-2033	Phase 3 - End YE 2033	Additions 2034-2038	Build-Out YE 2038
Plant in Service	\$8,555,800	\$1,522,100	\$10,077,900	\$4,066,000	\$14,143,900	\$4,803,650	\$18,947,550	\$7,236,600	\$26,184,150
Accumulated Depreciation	(130,282)	(853,223)	(983,505)	(1,530,477)	(2,513,982)	(2,226,264)	(4,740,247)	(6,014,386)	(10,754,633)
Net Plant	8,425,518	668,877	9,094,395	2,535,523	11,629,918	2,577,386	14,207,303	1,222,214	15,429,517
Working Capital (1/8th O&M)	0		31,645		46,027		70,571		100,100
Avg Unamortized Bal. of Extraordinary Exp.	0		0		0		115,192		160,095
Rate Base	\$8,425,518		\$9,126,040		\$11,675,945		\$14,393,066		\$15,689,712

Kiawah River Utility Company Wastewater System

Additions to Utility Investment

		ah River Utility Co Wastewater Syste			ELECTRONICA						
	Additions to Utility Investment										
a)	Working Capital Allowance				Ξ̈́						
,		Phase 1	Phase 2	Phase 3	Phase 4 🔟						
		YE 2022	YE 2026	YE 2030	YE 2034 L						
	O&M Expense	\$379,735	\$552,319	\$846,854	\$1,201,19 §						
	Bill in advance - 30 day payment period	8.3%	8.3%	8.3%	8.3%						
	Allowance	\$31,645	\$46,027	\$70,571	\$100,10 9						
					une						
b)	Unamortized Deferred Extraordinary Exper	nses			2						
		Phase 1	Phase 2	Phase 3	Phase 4						
	10 Year Occurrence	2019-2022	2023-2026	2027-2030	2031-2034						
	Membrane Element Replacement	\$0	\$0	\$115,192	\$160,09 5						
	Average Balance	\$0	\$0	\$115,192	\$160,09 \text{2}						

Schedule B.2

Kiawah River Utility Company Wastewater System

Utility Plant in Service

		Test Year YE 2019	Additions 2019-2022	Phase 1 YE 2022	Additions 2023-2026	Phase 2 YE 2026	Additions 2027-2030	Phase 3 YE 2030	Additions 2031-2034	Build-Out YE 2034
352	Franchise/Organization	\$50,000	\$0	\$50,000	\$0	\$50,000	\$0	\$50,000	\$0	\$50,000
353	Land	54,500	0	54,500	0	54,500	0	54,500	0	54,500
360	Force Mains	282,000	825,000	1,107,000	330,000	1,437,000	504,000	1,941,000	801,000	2,742,000
361	Gravity Mains	658,000	1,925,000	2,583,000	770,000	3,353,000	1,176,000	4,529,000	1,869,000	6,398,000
354	Structures & Improvements-T&D Plant	3,191,000	0	3,191,000	3,422,100	6,613,100	2,681,700	9,294,800	3,030,800	12,325,600
355	Power Generation Equipment	335,000	0	335,000	0, 122, 100	335,000	467,500	802,500	0	802,500
362	Receiving Wells	1,404,000	0	1,404,000	324,000	1,728,000	345,600	2,073,600	540,000	2,613,600
371	Pumping Equipment-Pumping Stations	936,000	0	936,000	216,000	1,152,000	230,400	1,382,400	360,000	1,742,400
371	Pumping Equipment-T&D	515,000	0	515,000	51,800	566,800	570,600	1,137,400	0	1,137,400
382	Outfall Sewers	95,000	0	95,000	97,600	192,600	72,300	264,900	80,100	345,000
380	Treatment & Disposal Equipment-T&D Plant	1,106,800	0	1,106,800	704,300	1,811,100	864,300	2,675,400	1,688,200	4,363,600
390	Ofc Furniture & Fixtures	15,000	1,500	16,500	16,500	33,000	16,500	49,500	16,500	66,000
391	Transportation Equipmt	0	0	0	30,000	30,000	0	30,000	30,000	60,000
393	Tools, Shop & Garage	3,000	0	3,000	0	3,000	0	3,000	0	3,000
394	Lab Equipment	13,000	0	13,000	0	13,000	0	13,000	0	13,000
396	Communication Equipment	1,000	0	1,000	0	1,000	1,000	2,000	0	2,000
	Total Sewer Plant	\$8,659,300	\$2,751,500	\$11,410,800	\$5,962,300	\$17,373,100	\$6,929,900	\$24,303,000	\$8,415,600	\$32,718,600
	CIAC - Impact Fees	-\$103,500	-\$1,229,400	-1,332,900	-\$1,896,300	-\$3,229,200	-\$2,126,250	-\$5,355,450	-\$1,179,000	-\$6,534,450
	Net Sewer Plant Investment	\$8,555,800	\$1,522,100	\$10,077,900	\$4,066,000	\$14,143,900	\$4,803,650	\$18,947,550	\$7,236,600	\$26,184,150

Schedule B.3

Kiawah River Utility Company Wastewater System

Accumulated Depreciation

		Test Year	Additions	Phase 1	Additions	Phase 2	Additions	Phase 3	Additions	Build-Out
	_	YE 2019	2019-2022	YE 2022	2023-2026	YE 2026	2027-2030	YE 2030	2031-2034	YE 2034
352	Franchise/Organization	\$1,250	\$7,500	\$8,750	\$10,000	\$18,750	\$10,000	\$28,750	\$20,000	\$48,750
353	Land	0	0	0	0	0	0	0	0	0
360	Force Mains	2,350	44,125	46,475	82,350	128,825	115,850	244,675	310,225	554,900
361	Gravity Mains	5,483	102,958	108,442	192,150	300,592	270,317	570,908	723,858	1,294,767
354	Structures & Improvements-T&D Plant	45,586	273,514	319,100	706,896	1,025,996	1,023,953	2,049,949	2,773,983	4,823,931
355	Power Generation Equipment	5,583	33,500	39,083	44,667	83,750	99,208	182,958	214,000	396,958
362	Receiving Wells	23,400	140,400	163,800	192,600	356,400	236,160	592,560	568,680	1,161,240
371	Pumping Equipment-Pumping Stations	23,400	140,400	163,800	192,600	356,400	236,160	592,560	568,680	1,161,240
371	Pumping Equipment-T&D	12,875	77,250	90,125	112,065	202,190	213,215	415,405	454,960	870,365
382	Outfall Sewers	792	4,750	5,542	12,027	17,568	17,058	34,626	45,333	79,958
380	Treatment & Disposal Equipment-T&D Plant	27,670	166,020	193,690	344,613	538,303	513,473	1,051,775	1,703,235	2,755,010
390	Ofc Furniture & Fixtures	500	3,250	3,750	7,050	10,800	10,350	21,150	31,250	52,400
391	Transportation Equipmt	4,800	0	4,800	2,143	6,943	17,143	24,086	57,857	81,943
393	Tools, Shop & Garage	60	360	420	480	900	480	1,380	960	2,340
394	Lab Equipment	650	3,900	4,550	5,200	9,750	5,200	14,950	10,400	25,350
396	Communication Equipment	50	300	350	400	750	550	1,300	1,600	2,900
	Total Sewer Plant	\$154,449	\$998,228	\$1,152,677	\$1,905,239	\$3,057,916	\$2,769,116	\$5,827,032	\$7,485,021	\$13,312,053
	-									
	0140.4	004407	04.45.004	0.100.171	4074 700	05.40.00.4	0540.054	0.1 000 705	4 470 004	00 557 400
	CIAC Amortization - Impact Fees	-\$24,167	-\$145,004	-\$169,171	-\$374,763	-\$543,934	-\$542,851	-\$1,086,785	-1,470,634	-\$2,557,420
	Net Sewer Plant Depreciation	\$130,282	\$853,223	\$983,505	\$1,530,477	\$2,513,982	\$2,226,264	\$4,740,247	\$6,014,386	\$10,754,633

Kiawah River Utility Company Wastewater System

Operating Statement

	Kiawah River Utilit Wastewater S <u>Operating Stat</u>	ystem		ELECTRONICALLY FILED Control C
Occupies Books	Phase 1	Phase 2	Phase 3	Build-Out 1
Operating Revenue:	•	.		\$1,147,500
Residential	\$141,780	\$508,980	\$894,540	10
Workforce Housing	-	39,780	79,560	119,340 [©]
Lodge	4,082	4,082	4,082	4,082 Line 158,533 e
Hotel Units	28,577	44,906	76,885	158,533 ត
Commercial	7,655	15,309	22,964	30,618 <u>N</u>
Recreation Facilities	9,492	21,092	21,092	21,092 🗻
Misc. Other Revenue	0	0	0	0
Total Revenues	191,585	634,150	1,099,124	1,481,166 D
Operating Expense:				1
O&M Expenses	379,735	552,319	846,854	1,201,195 °C
Depreciation	295,563	410,227	589,539	803,063
Amortization-Rate Case Expense	20,000	22,000	24,200	26,620 S
Amortization-Extraordinary Expenses	0	0	16,456	58,289
Property Taxes-RE	8,175	8,175	8,175	8,175
Utility Tax	360,300	471,000	543,100	487,600
Regulatory Assessments	1,210	4,005	6,941	487,600 C 9,354 cet
State and Federal Income Taxes	6,500	6,500	6,500	6,500 #
Total Operating Expenses	1,071,483	1,474,226	2,041,765	2,600,795
Net Operating Income	(\$879,898)	(\$840,076)	(\$942,642)	(\$1,119,629) ^{\overline{\sigma}}
Rate Base	\$9,126,040	\$11,675,945	\$14,393,066	\$15,689,712 S
Rate of Return	-9.64%	-7.19%	-6.55%	-7.14% Page 30 of 60
				30 of 60

Schedule C.1

Kiawah River Utility Company Wastewater System

Operation & Maintenance Expenses

	Test Year	Phase 1	Phase 2	Phase 3	Build-Out
	YE 2019	YE 2022	YE 2026	YE 2030	YE 2034
Salaries & Wages-Contract	\$21,000	\$50,000	\$54,121	\$117,163	\$210,031
Transportation Expense	2,000	5,306	11,486	12,433	22,289
Professional Services	3,000	8,531	9,235	9,996	11,946
Purchased Power	500	24,918	74,450	129,037	173,887
Sludge Disposal	0	91,800	88,920	152,400	185,280
Equipment Repair & Rentals	400	2,713	6,779	11,881	16,356
Materials & Repairs	300	4,069	10,172	17,826	24,542
Supplies, Testing & Chemicals	500	28,500	86,857	150,541	202,866
Insurance	36,000	36,000	55,788	61,239	108,589
Administration Fees	60,000	96,000	110,162	126,414	172,289
Bond Costs	5,250	5,250	5,250	5,250	5,250
Bad Debt Expense	0	4,800	15,450	27,075	37,275
Groundwater Monitoring	12,500	16,646	18,018	19,503	23,308
Lab Testing	4,000	4,162	4,505	4,877	5,831
Miscellaneous	1,000	1,040	1,126	1,219	1,456
Total O&M Expense	146,450	379,735	552,319	846,854	1,201,195

Schedule C.2

Kiawah River Utility Company Wastewater System

Depreciation Expense

			Test Year YE 2019	Phase 1 YE 2022	Phase 2 YE 2026	Phase 3 YE 2030	Build-Out YE 2034
352	Franchise/Organization		\$1,250	\$2,500	\$2,500	\$2,500	\$2,500
353	Land		0	0	0	0	0
360	Force Mains		2,350	18,050	22,625	31,375	45,000
361	Gravity Mains		5,483	42,117	52,792	73,208	105,000
354	Structures & Improvements-T&D Plant		45,586	91,171	188,946	265,566	352,160
355	Power Generation Equipment		5,583	11,167	11,167	26,750	26,750
362	Receiving Wells		23,400	46,800	52,200	63,360	81,480
371	Pumping Equipment-Pumping Stations		23,400	46,800	52,200	63,360	81,480
371	Pumping Equipment-T&D		12,875	25,750	28,340	56,870	56,870
382	Outfall Sewers		792	1,583	3,210	4,415	5,750
380	Treatment & Disposal Equipment-T&D Plant		27,670	55,340	90,555	133,770	218,180
390	Ofc Furniture & Fixtures		500	1,100	2,200	3,250	4,400
391	Transportation Equipmt		4,800	0	2,143	4,286	8,571
393	Tools, Shop & Garage		60	120	120	120	120
394	Lab Equipment		650	1,300	1,300	1,300	1,300
396	Communication Equipment		50	100	100	200	200
		Total	\$154,449	\$343,898	\$510,397	\$730,330	\$989,761
	CIAC Amortization		-\$24,167	-\$48,335	-\$100,170	-\$140,790	-\$186,699
	Net Depreciation Expense		\$130,282	\$295,563	\$410,227	\$589,539	\$803,063

Schedule C.3

Kiawah River Utility Company

Adjustments to Operating Statement - Taxes

1) Income Taxes at Proposed Rates

a) Adjustment to reflect State and Federal Income Taxes.

	Phase 1	Phase 2	Phase 3	Build-Out
Revenue Requirement-Initial Rates	191,585	634,150	1,099,124	1,481,166
O&M Expense	(379,735)	(552,319)	(846,854)	(1,201,195)
Depreciation	(295,563)	(410,227)	(589,539)	(803,063)
Amortization	(20,000)	(22,000)	(40,656)	(84,909)
Taxes - Other	(369,685)	(483,180)	(558,216)	(505,129)
Interest Expense	(273,337)	(368,958)	(435,089)	(463,449)
State Taxable Income	(1,146,735)	(1,202,534)	(1,371,230)	(1,576,579)
State Income Tax Rate	5.0%	5.0%	5.0%	5.0%
SIT Minimum State Tax	6,500	6,500	6,500	6,500
Federal Taxable Income	(1,153,235)	(1,209,034)	(1,377,730)	(1,583,079)
Federal Income Tax Rate	21.000%	21.000%	21.000%	21.000%
FIT	0	0	0	0
Adjustment	6.500	6.500	6.500	6.500

Schedule D

Kiawah River Utility Company Wastewater System

Capital Structure and Rate of Return

				Weighted	
PHASE 1	Amount	Ratio	Cost Rate	Cost	Return
YE 2022					
Note #1	4,415,786	48.39%	6.19%	3.00%	273,337
Equity	4,710,254	51.61%	9.50%	4.90%	447,474
	\$9,126,040	100.00%		7.90%	\$720,811
:	Ψ0,120,010	100.0070		1.0070	Ψ. 20,0
				Weighted	
PHASE 2	Amount	Ratio	Cost Rate	Cost	Return
YE 2026 Note #1	2 672 026	31.46%	6.19%	1.95%	227.254
Note #2	3,672,926 2,287,624	31.46% 19.59%	6.19%	1.95% 1.21%	227,354 141,604
Equity	5,715,395	48.95%	9.50%	4.65%	542,962
Equity .	3,713,393	40.93 /6	9.50 /6	4.03 /6	342,902
	\$11,675,945	100.00%		7.81%	\$911,921
: -					
	_			Weighted	_
PHASE 3	Amount	Ratio	Cost Rate	Cost	Return
YE 3030	0.700.044	40.000/	0.400/	4.470/	100.004
Note #1	2,728,341	18.96%	6.19%	1.17%	168,884
Note #2 Note #3	1,937,846	13.46% 16.42%	6.19% 6.19%	0.83% 1.02%	119,953
Equity	2,362,708 7,364,172	51.16%	9.50%	4.86%	146,252 699,596
Equity	7,304,172	31.10%	9.50 %	4.00 /6	099,590
	\$14,393,066	100.00%		7.88%	\$1,134,685
:					
				Maria Land	
DUACE 4	A	Datia	Coot Doto	Weighted	Datum
PHASE 4 YE 2034	Amount	Ratio	Cost Rate	Cost	Return
Note #1	1,527,250	9.73%	6.19%	0.60%	94,537
Note #2	1,493,084	9.52%	6.19%	0.59%	92,422
Note #3	2,033,319	12.96%	6.19%	0.80%	125,862
Note #4	2,433,415	15.51%	6.19%	0.96%	150,628
Equity	8,202,645	52.28%	9.50%	4.97%	779,251
•					
:	\$15,689,712	100.00%		7.92%	\$1,242,701

Schedule E.1

Kiawah River Utility Company Wastewater System

Billing Analysis at Phase 1 Rates Year-End 2022

			Imputed				
	Monthly Bills	Sq. Ft.	Monthly Flat Rate			onthly Ftg. Rate	Total Revenue
Residential	1,668		\$	85.00			\$141,780
Workforce Housing	0		\$	85.00			0
Lodge Units	72		\$	56.70			4,082
Hotel Units	504		\$	56.70			28,577
Commercial	12	11,250			\$	0.0567	7,655
Recreation Facilities (a)	48	13,950			\$	0.0567	9,492
	2,304						\$191,585
Misc. Other Revenue							\$0
Total Sewer Operating Revenue							\$191,585

Notes:

Recreation Facilities_include Outfitters, Farmstead Market, Swim Club, Chapel, Assembly Hall, and Fish Camp

Any difference between operating revenue and revenue requirement is due to rounding rates to the nearest cent.

Schedule E.2

Kiawah River Utility Company Wastewater System

Billing Analysis at Phase 2 Rates Year-End 2026

			Imputed					
	Monthly Bills	Sq. Ft.	Monthly Flat Rate		Monthly Sq. Ftg. Rate		Total Revenue	
Residential	5,988		\$	85.00			\$508,980	
Workforce Housing	468		\$	85.00			39,780	
Lodge Units	72		\$	56.70			4,082	
Hotel Units	792		\$	56.70			44,906	
Commercial	24	22,500	\$	-	\$	0.0567	15,309	
Recreation Facilities (a)	72	31,000	\$	-	\$	0.0567	21,092	
						•		
	7,416						\$634,150	
Misc. Other Revenue							\$0	
Total Sewer Operating Revenue							\$634,150	

Notes:

Recreation Facilities_include Outfitters, Farmstead Market, Swim Club, Chapel, Assembly Hall, and Fish Camp

Any difference between operating revenue and revenue requirement is due to rounding rates to the nearest cent.

Schedule E.3

Kiawah River Utility Company Wastewater System

Billing Analysis at Phase 3 Rates Year-End 2030

				Ir	nputed	
	Monthly Bills	Sq. Ft.	Monthly Flat Rate		lonthly Ftg. Rate	Total Revenue
Residential	10,524		\$ 85.00			\$894,540
Workforce Housing	936		\$ 85.00			79,560
Lodge Units	72		\$ 56.70			4,082
Hotel Units	1,356		\$ 56.70			76,885
Commercial	36	33,750	\$ -	\$	0.0567	22,964
Recreation Facilities (a)	72	31,000	\$ -	\$	0.0567	21,092
	12,996					\$1,099,124
Misc. Other Revenue						\$0
T. (10 0 v) D					:	\$1,099,124

Total Sewer Operating Revenue

Notes:

Recreation Facilities_include Outfitters, Farmstead Market, Swim Club, Chapel, Assembly Hall, and Fish Camp

Any difference between operating revenue and revenue requirement is due to rounding rates to the nearest cent.

Schedule E.4

Kiawah River Utility Company Wastewater System

Billing Analysis at System Build-Out

					mputed	
	Monthly Bills	Sq. Ft.	Monthly Flat Rate		flonthly Ftg. Rate	Total Revenue
	Dillo	<u> </u>	 i lat ixate	<u> </u>	r tg. Nate	Kevenue
Residential	13,500		\$ 85.00			\$1,147,500
Workforce Housing	1,404		\$ 85.00			119,340
Lodge Units	72		\$ 56.70			4,082
Hotel Units	2,796		\$ 56.70			158,533
Commercial	48	45,000	\$ -	\$	0.0567	30,618
Recreation Facilities	72	31,000	\$ -	\$	0.0567	21,092
					-	
	17,892					\$1,481,166
Misc. Other Revenue						\$0
Total Sewer Operating Revenue					=	\$1,481,166

Notes

Recreation Facilities_include Outfitters, Farmstead Market, Swim Club, Chapel, Assembly Hall, and Fish Camp

Any difference between operating revenue and revenue requirement is due to rounding rates to the nearest cent.

Schedule F

Kiawah River Utility Company

Rate Design

													Full Cos	t Recovery				
										PHA		PHA			SE 3	BUILI		
			Build-Out					Initial F		Factored	Monthly	Factored	Monthly	Factored	Monthly	Factored	N	Vonthly
			gpd	Connections	Factor	ERUs	F	er Unit	Per SF	ERUs	Rate	ERUs	Rate	ERUs	Rate	ERUs		Rate
Residential	1,125	Units	337,500	1,125	1.00	1,125.00	\$	85.00		139.00	\$ 862.43	499.00	\$ 344.64	877.00	\$ 264.16	1,125.00	\$	236.02
Workforce Housing	117	Units	35,100	117	1.00	117.00	\$	85.00		-	\$ 862.43	39.00	\$ 344.64	78.00	\$ 264.16	117.00	\$	236.02
Lodge Units	6	Units	1,200	6	0.67	4.00	\$	56.70		4.00	\$ 575.24	4.00	\$ 229.87	4.00	\$ 176.19	4.00	\$	157.43
Hotel Units	233	Units	46,623	233	0.67	155.41	\$	56.70		28.20	\$ 575.24	44.30	\$ 229.87	75.80	\$ 176.19	155.41	\$	157.43
Commercial	45,000	Sq. Ft.	9,000	4	7.50	30.00			\$0.0567	7.50	\$ 0.5753	15.00	\$ 0.2299	22.50	\$ 0.1762	30.00	\$	0.1574
Recreation Facilities (a)	31,000	Sq. Ft.	6,210	6	3.45	20.70			\$0.0567	9.30	\$ 0.5753	20.70	\$ 0.2299	20.70	\$ 0.1762	20.70	\$	0.1574
			435,633	1,491		1,452.11				188.00		622.00		1,078.00		1,452.11		
Revenue Requirement										\$1,945,632		\$2,572,391		\$3,417,166		\$4,112,672		
Monthly Cost of Service Per Annual Cost of Service Per I										\$ 862.43 \$10,349.16		\$ 344.64 \$ 4,135.68		\$ 264.16 \$ 3,169.92		\$ 236.02 \$ 2,832.24		

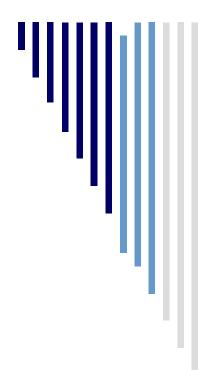
Note (a): Recreation Facilities include Outfitters, Farmstead Market, Swim Club, Chapel, Assembly Hall, and Fish Camp.

Connection Fees:	One-Time Charge	\$ 4,500.00	Per ERU		Per Unit	Per SF
Residential				\$5,062,500	\$ 4,500.00	
Workforce Housing				\$ 526,500	\$ 4,500.00	
Lodge Units				\$ 18,000	\$ 3,000.00	
Hotel Units				\$ 699,350	\$ 3,000.00	
Commercial				\$ 135,000	\$33,750.00	\$3.0000
Recreation Facilities (a)				\$ 93,150	\$15,530.00	\$3.0000
				\$6,534,500		

APPENDIX C

Guastella Associates, LLC

Qualifications & Experience



Rate Setting
Valuation
Management
Consulting

...SERVING REGULATED AND UNREGULATED WATER AND WASTEWATER UTILITIES SINCE 1978

INTRODUCTION GUASTELLA ASSOCIATES, LLC

Guastella Associates, LLC ("formerly John F. Guastella Associates, Inc.") is a consulting firm that specializes in providing utility rate setting, valuation and management services for public and privately-owned water and wastewater utilities.

John F. Guastella established Guastella Associates in 1978. Previously, Mr. Guastella was Director of the Water Division of the New York Public Service Commission. The Water Division provided the New York Commission with technical assistance in regulating the rates and service provided by approximately 450 privately-owned utilities. During the period from 1987 through 1991, Mr. Guastella also managed a 5,500 customer water utility in New York State. In 1989, Guastella Associates acquired the rates and valuation section of Coffin & Richardson, Inc., a general consulting firm that also provided a full range of services to water and wastewater utilities. Since 2009, Guastella Associates has served as the general manager of Daufuskie Island Utility Company, Inc. ("DIUC"), responsible for its day-to-day operations, billing, bookkeeping, financing, capital improvement projects and regulatory relations. DIUC provides water and wastewater service to some 550 connected customers and 600 availability customers located on Daufuskie Island, South Carolina.

As can be seen from the following qualifications and experience, key staff members have many years of combined experience in virtually every aspect of utility rate setting and valuation. The technical expertise of key staff, combined with their former employment by real estate and utility companies, a regulatory agency, and the management of water utilities, provides a total perspective towards addressing the rates and valuation needs of today's water and wastewater utilities.

Guastella Associates has assisted the largest privately-owned utilities with respect to the most challenging issues, performing complex studies and providing expert testimony in administrative hearings as well as court proceedings. In addition, our client base has included hundreds of small water and wastewater utilities - - obtaining rate increases that turn operating losses into profits, posturing them for financing, correcting record keeping errors and, for some, negotiating their sale at multiples of their original cost net investment rate base. Some of our most successful assignments have been to help establish new developer-related water and wastewater utilities, applying the correct principles at the outset in order to develop fully compensatory initial rates, record keeping procedures and asset management, so they are structured to become self-sustaining utilities that will achieve the highest possible profit and ultimate market value.

Our wide-range of experience and expertise has enabled us to successfully address the special needs of large investor-owned utilities in rate cases and condemnation proceedings.



OUTLINE OF SERVICES GUASTELLA ASSOCIATES, LLC

Guastella Associates, LLC ("formerly John F. Guastella Associates, Inc.") is a consulting firm specializing in utility management, valuation, appraisals and rate determinations. Guastella Associates has been providing professional services to regulated and unregulated utilities since 1978.

Specific areas of expertise includes:

I. RATE ANALYSIS

A. Revenue Requirements

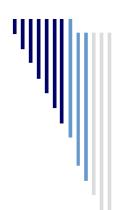
- 1. Examination of books and records -- revenues, expenses and capital investment.
- 2. Determination of the cost of providing service (revenue requirement) -- normalize historical data, establish known changes and perform projections.

B. Rate Design

- 1. Perform cost allocation studies to establish cost of service for residential, commercial, industrial, wholesale and fire protection customers, and for other special users.
- 2. Develop rate structures -- combine billing analyses and cost allocations to form usage rates, flat rates, minimum service and facilities charges, and such other special charges as connection fees, availability rates, etc.

C. Reports

- 1. Investor-owned utilities -- prepare complete rate filings for submission to regulatory agencies; prepare testimony, exhibits, and assist in all aspects of adjudication process.
- 2. Municipal utilities -- prepare detailed rate reports in support of rate increases for use by municipal officials and presentation at municipal hearings.



OUTLINE OF SERVICES GUASTELLA ASSOCIATES, LLC

II. VALUATIONS

A. Appraisals

- 1. Eminent domain condemnation proceedings, negotiations for sale of utilities, damage claims for insurance and ad valorem tax and management purposes.
- 2. Determinations of original cost, replacement cost, reproduction cost and market value, including going concern value.
- 3. Calculation of the present value of cash flow under the income approach to market value determinations.
- 4. Analyses of market data under the sales comparison approach.

B. <u>Depreciation</u>

- 1. Actuarial studies using retirement rate or simulated plant balances methods to determine average service lives of physical property, theoretical depreciation reserve requirements and depreciation rates.
- 2. Establish affordable depreciation rates on the basis of comparative analyses of similar property of other utilities and practices of regulatory agencies and association

C. Feasibility Studies

- 1. Utility acquisitions by investors and municipalities.
- 2. Economic studies to establish extension of service costs and policy -- inside and outside service area.
- 3. Main extension agreements, guaranteed revenue contracts, refund provisions.

D. Financial Planning

- 1. Establish financing requirements for capital improvements.
- 2. Determine revenue and rate needs for various combinations of debt and equity financing.
- 3. Assist certain utilities in securing financing.
- 4. Establish financing needs, initial rates and regulatory approval of proposed new utilities.

III. MANAGEMENT

A. Operations

- 1. Provides general management of water and wastewater utilities.
- 2. Assist in day-to-day decisions as to utility accounting and related impact on rates.
- 3. Solve problems as to record keeping in accordance with regulatory requirements and prescribed systems of accounts.
- 4. Establish general policy and tariff provisions for customer service, billing, collecting, meter testing, complaint handling, and customer and regulatory relations.

B. Administrative

- $1. \ Coordinate \ activities \ with \ regulatory \ agencies \ to \ assure \ compliance \ with \ rules, \ regulations \ and \ orders.$
- 2. Negotiations for purchase or sale of utility property and special contracts.

C. Training

- 1. On-the-job training for employees while working on various projects.
- 2. Special educational seminars on all aspects of utility rate settings, financing, valuation and rules.

PROFESSIONAL QUALIFICATIONS AND EXPERIENCE of JOHN F. GUASTELLA

B.S., Mechanical Engineering, Stevens Institute of Technology, 1962

Member:

American Water Works Association, Lifetime Member National Association of Water Companies New England Water Works Association, Lifetime Member

Committees:

AWWA, Water Rates Committee (Water Rates Manual M-1, 1983 Edition)
National Association of Regulatory Utility Commissioners (NARUC) and NAWC, Joint-Committee on Rate Design
NAWC, Rates and Revenues Committee

NAWC, Small Water Company Committee

Mr. Guastella is President of Guastella Associates, LLC ("formerly John F. Guastella Associates, Inc.") which provides management, valuation and rate consulting services for municipal and investor-owned utilities, as well as regulatory agencies. His clients include utilities in the states of Alaska, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Missouri, Michigan, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, and Virginia. He has provided consulting services that include all aspects of utility regulation and rate setting, encompassing revenue requirements, revenues, operation and maintenance expenses, depreciation, taxes, return on investment, cost allocation and rate design. He has performed depreciation studies for the establishment of average service lives and depreciation rates of utility property. He has performed appraisals of utility companies for management purposes and in connection with condemnation proceedings. He has also negotiated the sale of utility companies. He directs the general management of a water and wastewater utility in South Carolina.

Mr. Guastella served for more than four years as President of Country Knolls Water Works, Inc., a water utility that served some 5,500 customers in Saratoga County, New York. He also served as a member of the Board of Directors of the National Association of Water Companies.

Mr. Guastella has qualified and testified as an expert witness before regulatory agencies and municipal jurisdictions in the states of Alaska, Arizona, California, Connecticut, Delaware, Florida, Georgia, Illinois, Kentucky, Indiana, Maryland, Massachusetts, Missouri, Montana, Nevada, New Hampshire, New Mexico, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas and Virginia.

Prior to establishing his own firm, Mr. Guastella was employed by the New York State Public Service Commission for sixteen years. For two years he was involved in the regulation of electric and gas utilities, with the remaining years devoted to the regulation of water utilities. In 1970, he was promoted to Chief of Rates and Finance in the Commission's Water Division. In 1972, he was made Assistant Director of the Water Division. In 1974, he was appointed by Alfred E. Kahn, then Chairman of the Commission, to be Director of the Water Division, a position he held until he resigned from the Commission in August 1978.

At the Commission, his duties included the performance and supervision of engineering and economic studies concerning rates and service of many public utilities. As Director of the Water Division, he was responsible for the regulation of more than 450 water companies in New York State and headed a professional staff of 32 engineers and three technicians. A primary duty was to attend Commission sessions and advise the Commission during its decision making process. In the course of that process, an average of about fifty applications per year would be reviewed and analyzed. The applications included testimony, exhibits and briefs

involving all aspects of utility valuation and rate setting. He also made legislative proposals and participated in drafting Bills that were enacted into law: one expanded the N.Y. Public Service Commission's jurisdiction over small water companies and another dealt specifically with rate regulation and financing of developer-related water systems.

In addition to his employment and client experience, Mr. Guastella served as Vice-Chairman of the Staff-Committee on Water of the National Association of Regulatory Utility Commissioners (NARUC). This activity included the preparation of the "Model Record-Keeping Manual for Small Water Companies," which was published by the NARUC. This manual provides detailed instruction on the kinds of operation and accounting records that should be kept by small water utilities, and on how to use those records.

Each year since 1974 he has prepared study material, assisted in program coordination and served as an instructor at the Eastern Annual Seminar on Water Rate Regulation sponsored over the years by the NARUC in conjunction with the University of South Florida, Florida Atlantic University, the University of Utah, Florida State University, the University of Florida and currently Michigan State University. In 1980 he was instrumental in the establishment of the Western NARUC Rate Seminar and has annually served as an instructor since that time. This course is recognized as one of the best available for teaching rate-setting principles and methodology. More than 8,000 students have attended this course, including regulatory staff, utility personnel and members of accounting, engineering, legal and consulting firms throughout the country.

Mr. Guastella served as an instructor and panelist in a seminar on water and wastewater regulation conducted by the Independent Water and Sewer Companies of Texas. In 1998, he prepared and conducted a seminar on basic rate regulation on behalf of the New England Chapter of the National Association of Water Companies. In 2000 and 2001, Mr. Guastella developed and conducted a special seminar for developer related water and wastewater utilities in conjunction with Florida State University, and again in 2003 in conjunction with the University of Florida. It provided essential training for the financial structuring of small water and wastewater utilities, rate setting, financing and the establishment of their market value in the event of a negotiated sale or condemnation. In 2004, he prepared and conducted a special workshop seminar on behalf of the Office of Regulatory Staff of South Carolina, covering rate setting, valuation and general regulation of water and wastewater utilities. In 2006, he participated in an expert workshop on full cost pricing conducted by the U. S. Environmental Protection Agency in coordination with the Institute of Public Utilities, Michigan State University. In 2006 and again in 2013, he prepared and conducted a special seminar on rate setting and valuation on behalf of the New York Chapter of the NAWC. In 2007 and again in 2015, he prepared and conducted a special seminar on rate setting and valuation on behalf of the New England Chapter of NAWC.

Mr. Guastella has made presentations on a wide variety of rate, valuation and regulatory issues at meetings of the National Association of Regulatory Utility Commissioners, the American Water Works Association, the New England Water Works Association, the National Association of Water Companies, the New England Conference of Public Utilities Commissioners, the Florida, New England, New Jersey and New York Chapters of NAWC, the Mid-America Regulatory Conference, the Southeastern Association of Regulatory Utility Commissioners, the Pennsylvania Environmental Conference, the Public Utility Law Section of the New Jersey Bar Association, and the NAWC Water Utility Executive Council.

Year	Client	State	Regulatory Docket/Case Number
1966	Sunhill Water Corporation	New York	23968
1967	Amagansett Water Company	New York	24210
1967	Worley Homes, Inc.	New York	24466
1968	Amagansett Water Company	New York	24718
1968	Amagansett Water Company	New York	24883
1968	Sunhill Water Corporation	New York	23968
1968	Worley Homes, Inc.	New York	Supreme Court
1969	Amagansett Water Supply	New York	24883
1969	Citizens Water Supply Co.	New York	25049
1969	Worley Homes, Inc.	New York	24466/24992
1970	Brooklyn Union Gas Company	New York	25448
1970	Consolidated Edison of New York	New York	25185
1971	Hudson Valley Water Companies	New York	26093
1971	Jamaica Water Supply Company	New York	26094
1971	Port Chester Water Works, Inc.	New York	25797
1971	U & I Corp Merrick District	New York	26143
1971	Wanakah Water Company	New York	25873
1972	Spring Valley Water Company	New York	26226
1972	U & I Corp Woodhaven District	New York	26232
1973	Citizens Water Supply Company	New York	26366
1978	Rhode Island DPU&C (Bristol County)	Rhode Island	1367A
1979	Candlewick Lake Utilities Co.	Illinois	76-0218
1979	Candlewick Lake Utilities Co.	Illinois	76-0347
1979	Candlewick Lake Utilities Co.	Illinois	78-0151
1979	Jacksonville Suburban Utilities	Florida	770316-WS
1979	New York Water Service Corporation	New York	27594
1979	Salem Hills Sewerage Disposal Corp. v. V. of Voorheesville	New York	Supreme Court

Year	Client	State	Regulatory Docket/Case Number
1979	Seabrook Water Corporation	New Jersey	7910-846
1979	Southern Utilities Corporation	Florida	770317-WS
1979	Township of South Brunswick	New Jersey	Municipal
1979	Westchester Joint Water Works	New York	Municipal
1979	Woodhaven Utilities Corporation	Illinois	77-0109
1980	Crestwood Village Sewer Company	New Jersey	BPU 802-78
1980	Crestwood Village Water Company	New Jersey	BPU 802-77
1980	Gateway Water Supply Corporation	Texas	Municipal
1980	GWW-Central Florida District	Florida	800004-WS
1980	Jamaica Water Supply Company	New York	27587
1980	Rhode Island DPU&C (Newport Water)	Rhode Island	1480
1981	Briarcliff Utilities, Inc.	Texas	3620
1981	Candlewick Lake Utilities Co.	Illinois	81-0011
1981	Caroline Water Company, Inc.	Virginia	810065
1981	GDU, Inc Northport	Florida	Municipal
1981	GDU, Inc Port Charlotte	Florida	Municipal
1981	GDU, Inc Port Malabar	Florida	80-2192
1981	Hobe Sound Water Company	Florida	8000776
1981	Lake Buckhorn Utilities, Inc.	Ohio	80-999
1981	Lake Kiowa Utilities, Inc.	Texas	3621
1981	Lakengren Utilities, Inc.	Ohio	80-1001
1981	Lorelei Utilities, Inc.	Ohio	80-1000
1981	New York Water Service Corporation	New York	28042
1981	Rhode Island DPU&C (Newport Water)	Rhode Island	1581
1981	Shawnee Hills Utility Company	Ohio	80-1002
1981	Smithville Water Company, Inc.	New Jersey	808-541
1981	Spring Valley Water Company, Inc.	New York	27936
1981	Spring Valley Water Company, Inc.	New York	27936
1981	Sunhill Water Corporation	New York	27903

Year	Client	State	Regulatory Docket/Case Number
1981	Swan Lake Water Corporation	New York	27904
1982	Chesterfield Commons Sewer Company	New Jersey	822-84
1982	Chesterfield Commons Water Company	New Jersey	822-83
1982	Crescent Waste Treatment Corp.	New York	Municipal
1982	Crestwood Village Sewer Company	New Jersey	821-33
1982	Crestwood Village Water Company	New Jersey	821-38
1982	Salem Hills Sewerage Disposal Corp.	New York	Municipal
1982	Township of South Brunswick	New Jersey	Municipal
1982	Woodhaven Utilities Corporation	Illinois	82-0167
1983	Country Knolls Water Works, Inc.	New York	28194
1983	Heritage Hills Water Works Corp.	New York	28453
1984	Crestwood Village Sewer Company	New Jersey	8310-861
1984	Crestwood Village Water Company	New Jersey	8310-860
1984	Environmental Disposal Corp.	New Jersey	816-552
1984	GDU, Inc Port St. Lucie	Florida	830421
1984	Heritage Village Water (water/sewer)	Connecticut	84-08-03
1984	Hurley Water Company, Inc.	New York	28820
1984	New York Water Service Corporation	New York	28901
1985	Deltona Utilities (water/sewer)	Florida	830281
1985	J. Filiberto Sanitation, Inc.	New Jersey	8411-1213
1985	Sterling Forest Pollution Control	New York	Municipal
1985	Water Works Enterprise, Grand Forks	North Dakota	Municipal
1986	GDU, Inc Port Charlotte	Florida	Municipal
1986	GDU, Inc Sebastian Highlands	Florida	Municipal
1986	Kings Grant Water/Sewer Companies (settled)	New Jersey	WR8508-868
1986	Mt. Ebo Sewage Works, Inc.	New York	Municipal
1986	Sterling Forest Pollution Control	New York	Municipal
1987	Country Knolls Water Works, Inc.	New York	29443
1987	Crestwood Village Sewer Co. (settled)	New Jersey	WR8701-38

Year	Client	State	Regulatory Docket/Case Number
1987	Deltona Utilities – Marco Island	Florida	85151-WS
1987	Deltona Utilities, Inc Citrus Springs (settled)	Florida	870092-WS
1987	First Brewster Water Corp. v. Town of Southeast (settled) New York	Supreme Court
1987	GDU, Inc Silver Springs Shores	Florida	870239-WS
1987	Ocean County Landfill Corporation	New Jersey	SR-8703117
1987	Palm Coast Utility Corporation	Florida	870166-WS
1987	Sanlando Utilities Corp. (settled)	Florida	860683-WS
1987	Township of South Brunswick	New Jersey	Municipal
1987	Woodhaven Utilities Corp. (settled)	Illinois	87-0047
1988	Crescent Estates Water Co., Inc.	New York	88-W-035
1988	Elizabethtown Water Co.	New Jersey	OAL PUC3464-88
1988	Heritage Village Water Company	Connecticut	87-10-02
1988	Instant Disposal Service, Inc.	New Jersey	SR-87080864
1988	J. Filiberto Sanitation v. Morris County Transfer Station	New Jersey	01487-88
1988	Ohio Water Service Co.	Ohio	86-1887-WW-CO1
1988	St. Augustine Shores Utilities	Florida	870980-WS
1989	Elizabethtown Water Co.	New Jersey	BPU WR89020132J
1989	GDU (FPSC generic proceeding as to rate setting procedures)	Florida	880883-WS
1989	Gordon's Corner Water Co.	New Jersey	OAL PUC479-89
1989	Heritage Hills Sewage Works	Connecticut	Municipal
1989	Heritage Village Water Company	Connecticut	87-10-02
1989	Palm Coast Utility Corporation	Florida	890277-WS
1989	Southbridge Water Supply Co.	Massachusetts	DPU 89-25
1989	Sterling Forest Water Co.	New York	PSC 88-W-263
1990	American Utilities, Inc United States Bankruptcy Court	t New Jersey	85-00316
1990	City of Carson City	Nevada	Municipal
1990	Country Knolls Water Works, Inc.	New York	90-W-0458
1990	Elizabethtown Water Company	New Jersey	WR900050497J

Year	Client	State	Regulatory Docket/Case Number
1990	Kent County Water Authority	Rhode Island	1952
1990	Palm Coast Utility Corporation	Florida	871395-WS
1990	Southern States Utilities, Inc.	Florida	Workshop
1990	Trenton Water Works	New Jersey	WR90020077J
1990	Waste Management of New Jersey	New Jersey	SE 87070552
1990	Waste Management of New Jersey	New Jersey	SE 87070566
1991	City of Grand Forks	North Dakota	Municipal
1991	Gordon's Corner Water Co.	New Jersey	OAL PUC8329-90
1991	Southern States Utilities, Inc.	Florida	900329-WS
1992	Elizabethtown Water Co.	New Jersey	WR 91081293J
1992	General Development Utilities, Inc Port Malabar Division	Florida	911030-WS
1992	General Development Utilities, Inc West Coast Division	Florida	911067-WS
1992	Heritage Hills Water Works, Inc.	New York	92-2-0576
1993	General Development Utilities, Inc Port LaBelle Division	Florida	911737-WS
1993	General Development Utilities, Inc Silver Springs Shores	Florida	911733-WS
1993	General Waterworks of Pennsylvania - Dauphin Cons. Water Supply	Pennsylvania	R-00932604
1993	Kent County Water Authority	Rhode Island	2098
1993	Southern States Utilities - FPSC Rulemaking	Florida	911082-WS
1993	Southern States Utilities - Marco Island	Florida	920655-WS
1994	Capital City Water Company	Missouri	WR-94-297
1994	Capital City Water Company	Missouri	WR-94-297
1994	Elizabethtown Water Company	New Jersey	WR94080346
1994	Elizabethtown Water Company	New Jersey	WR94080346
1994	Environmental Disposal Corp.	New Jersey	WR94070319
1994	General Development Utilities - Port Charlotte	Florida	940000-WS
1994	General Waterworks of Pennsylvania	Pennsylvania	R-00943152

Year	Client	State	Regulatory Docket/Case Number
1994	Hoosier Water Company - Mooresville Division	Indiana	39839
1994	Hoosier Water Company - Warsaw Division	Indiana	39838
1994	Hoosier Water Company - Winchester Division	Indiana	39840
1994	West Lafayette Water Company	Indiana	39841
1994	Wilmington Suburban Water Corporation	Delaware	94-149 (stld)
1995	Butte Water Company	Montana	Cause 90-C-90
1995	Heritage Hills Sewage Works Corporation	New York	Municipal
1996	Consumers Illinois Water Company	Illinois	95-0342
1996	Elizabethtown Water Company	New Jersey	WR95110557
1996	Palm Coast Utility Corporation	Florida	951056-WS
1996	PenPac, Inc.	New Jersey	OAL-00788-93N
1996	Southern States Utilities, Marco Island	Florida	950495-WS
1997	Crestwood Village Water Company	New Jersey	BPU 96100739
1997	Indiana American Water Co., Inc.	Indiana	IURC 40703
1997	Missouri-American Water Company	Missouri	WR-97-237
1997	South County Water Corp	New York	97-W-0667
1997	United Water Florida	Florida	960451-WS
1998	Consumer Illinois Water Company	Illinois	98-0632
1998	Consumers Illinois Water Company	Illinois	97-0351
1998	Heritage Hills Water Company	New York	97-W-1561
1998	Missouri-American Wastewater Company	Missouri	SR-97-238
1999	Consumers Illinois Water Company	Illinois	99-0288
1999	Environmental Disposal Corp.	New Jersey	WR99040249
1999	Indiana American Water Co., Inc.	Indiana	IURC 41320
2000	South Haven Sewer Works, Inc.	Indiana	Cause: 41410
2000	Utilities Inc. of Maryland	Maryland	CAL 97-17811
2001	Artesian Water Company	Delaware	00-649
2001	Citizens Utilities Company	Illinois	01-0001
2001	Elizabethtown Water Company	New Jersey	WR-0104205

Year	Client	State	Regulatory Docket/Case Number
2001	Kiawah Island Utility, Inc.	South Carolina	2001-164-W/S
2001	Placid Lakes Water Company	Florida	011621-WU
2001	South Haven Sewer Works, Inc.	Indiana	41903
2001	Southlake Utilities, Inc.	Florida	981609-WS
2002	Artesian Water Company	Delaware	02-109
2002	Consumers Illinois Water- Grant Park	Illinois	02-0480
2002	Consumers Illinois Water- Village Woods	Illinois	02-0539
2002	Valencia Water Company	California	02-05-013
2003	Consumers Illinois Water - Indianola	Illinois	03-0069
2003	Elizabethtown Water Company	New Jersey	WR-030-70510
2003	Golden Heart Utilities, Inc.	Alaska	U-02-13, 14 & 15
2003	Utilities, Inc. – Georgia	Georgia	CV02-0495-AB
2004	Aquarion Water Company	Connecticut	04-02-14
2004	Artesian Water Company	Delaware	04-42
2004	El Dorado Utilities, Inc.	New Mexico	D-101-CU-2004-
2004	Environmental Disposal Corp.	New Jersey	DPU WR 03 070509
2004	Heritage Hills Water Company	New York	03-W-1182
2004	Sun Valley Water & Washoe County Dept. of Water Revenues	Nevada	TMWA Municipal
2004	Jersey City MUA	New Jersey	Municipal
2004	Rockland Electric Company	New Jersey	EF02110852
2005	Aquarion Water Company	New Hampshire	DW 05-119
2005	Intercoastal Utilities, Inc.	Florida	04-0007-0011-0001
2005	Haig Point Utility Company, Inc.	South Carolina	2005-34-W/S
2005	South Central Connecticut Regional Water Auth.	Connecticut	Municipal
2006	Pennichuck Water Works, Inc.	New Hampshire	DW-04048
2006	Village of Williston Park	New York	Municipal
2006	Jersey City MUA	New Jersey	Municipal
2006	Groton Utilities	Connecticut	Municipal

Year	Client	State	Regulatory Docket/Case Number
2006	Connecticut Water Company	Connecticut	06-07-08
2006	Birmingham Utilities, Inc.	Connecticut	06-05-10
2006	Aqua Florida Utilities, Inc.	Florida	060368-WS
2007	Aquarion Water Company of CT	Connecticut	07-05-19
2007	Pennichuck Water Works, Inc.	New Hampshire	DW 04-048
2007	Aqua Indiana - Utility Center	Indiana	43331
2007	Environmental Disposal Corp.	New Jersey	WR 04 080760
2007	Aqua Florida Utilities, Inc.	Florida	07-0183
2007	Aqua Illinois, Inc Hawthorn Woods, Willowbrook & Vermilion	Illinois	07-0620/07-0621/08-0067
2008	Aqua Florida Utilities, Inc.	Florida	080121-WS
2008	Aquarion Water Company of MA	Massachusetts	D.P.U. 08-27
2008	Haig Point Utility Company, Inc.	South Carolina	2007-414-WS
2009	R.M.V. Land & C.M. Livestock, L.C.C.	New Jersey	EM02050313
2010	City of Griffin	Georgia	Civil Action No. 09V-2866
2010	Connecticut Water Company	Connecticut	09-12-11
2010	Montville WPCA	Connecticut	1400012464
2010	Milford Water Company	Massachusetts	DPU 10-78
2010	Arizona American Water Company	Arizona	W-01303A-10-0448
2011	Aqua Illinois	Illinois	ICC Docket (Consolidated)
2011	Artesian Water Company	Maryland	MPSC Case 9252
2011	Artesian Water Company	Delaware	PSC 11-207
2011	Kiawah Island Utility, Inc.	South Carolina	2011-317-WS
2012	Washington Gas Light	Maryland	Senate SB541
2012	Washington Gas Light	Maryland	House HB662
2012	Daufuskie Island Utility	South Carolina	2011-229-W/S
2012	Milford Water Company	Massachusetts	DPU 12-86
2013	Artesian Water Company	Pennsylvania	2:10-CV-07453-JP
2013	Aquarion Water Company - Oxford	Massachusetts	CA 09-00592E

Year	Client	State	Regulatory Docket/Case Number	
2013	Water Management Services	Florida	110200-WU	
2013	City of Fernandina Beach	Florida	Civil Action No. 13CA000485AXYX	
2013	City of Elizabeth	New Jersey	Docket Nos. UNN-L-0556-10 and UNN-L-2608-11	
2014	Daufuskie Island Utility Company, Inc.	South Carolina	Case No. 2013-CP-7-02255	
2014	Artesian Water Company	Delaware	Docket No. PSC 14-132	
2014	Aquarion Water Company - Hingham	New Hampshire	SUCU 2013-03159-BLS2	
2015	EPCOR	Arizona	ACC Docket # WS-01303A-14-0010	
2015	Mountain Water Company	Montana	Case # DV-14-352	
2015	Daufuskie Island Utility Company, Inc.	South Carolina	Docket No. 2014-346-WS	
2015	Housatonic Water Works	Massachusetts	D.P.U. 15-179	
2016	Epcor Water Arizona	Arizona	Docket No. W501303A-16-0145	
2016	Community Utilities of Indiana	Indiana	Case No. 44724	
2016	Utilities Inc. of Florida	Florida	Docket No. 16101-WS	
2017	Epcor Water Arizona	Arizona	Docket No. W10303A-17-0141	
2017	Aquarion Water Company of Massachusetts	Massachusetts	D.P.U. 17-90	
2017	Milford Water Company	Massachusetts	D.P.U. 17-107	
2018	Water Services Corp. of Kentucky	Kentucky	Case No. 2018-00208	
2018	Epcor Water New Mexico, Inc.	New Mexico	Case No. 18_00124-UT	
2019	Daufuskie Island Utility Company, Inc.	South Carolina	Docket No. 2018-364	

Papers and Presentations By John F. Guastella

Year	Title	Forum
1974 through 2019	 Basics of Rate Setting Cost Allocation and Rate Design Revenue Requirements 	Semi-annual seminars on utility rate regulation, National Association of Regulatory Utility Commissioners, sponsored by the University of South Florida, the University of Utah, Florida State University, The University of Florida and currently Michigan State University
1974	Rate Design Studies: A Regulatory Point-of- View	Annual convention of the National Association of Water Companies, New Haven, Connecticut
1976	Lifeline Rates	Annual convention of the National Association of Water Companies, Chattanooga, Tennessee
1977	Regulating Water Utilities: The Customers' Best Interest	Annual symposium of the New England Conference of Public Utilities Commissioners, Mystic Seaport, Connecticut
1978	Rate Design: Preaching v. Practice	Annual convention of the National Association of Water Companies, Baton Rouge, Louisiana
1979	Small Water Companies	Annual symposium of the New England Conference of Public Utilities Commissioners, Newport, Rhode Island
1979	Rate Making Problems Peculiar to Private Water and Sewer Companies	Special educational program sponsored by Independent Water and Sewer Companies of Texas, Austin, Texas
1980	Water Utility Regulation	Annual meeting of the National Association of Regulatory Utility Commissioners, Houston, Texas
1981	The Impact of Water Rates on Water Usage	Annual Pennsylvania Environmental Conference, Harrisburg, Pennsylvania
1981	A Realistic Approach to Regulating Water Utilities	Mid-America Regulatory Conference, Clarksville, Indiana
1982	Issues in Water Utility Regulation	Annual symposium of the New England Conference of Public Utilities Commissioners, Rockport, Maine
1982	New Approaches to the Regulation of Water Utilities	Southeastern Association of Regulatory Utility Commissioners, Asheville, North Carolina
1983	Allocating Costs and Revenues Fairly and Effectively	Maryland Water and Sewer Finance Conference, Westminster, Maryland
1983	Lifeline and Social Policy Pricing	Annual conference of the American Water Works Association, Las Vegas, Nevada (published)
1984	The Real Cost of Service: Some Special Considerations	Annual New Jersey Section AWWA Spring Meeting, Atlantic City, New Jersey
1987	Margin Reserve: It's Not the Issue	Florida Waterworks Association Newsletter, April/May/June 1987 issue

Papers and Presentations By John F. Guastella

Year	Title	Forum
1987	A "Current" Issue: CIAC	NAWC - New England Chapter November 6, 1987 meeting
1988	Small Water Company rate Setting: Take It or Leave It	NAWC - New York Chapter June 14, 1988 meeting
1989	The Solution to all the Problems of Good Small Water Companies	NAWC Quarterly magazine, Winter issue
1989	Current Issues Workshop - Panel	New England Conference of Public Utilities Commissioners, Kennebunkport, Maine
1991	Alternative Rate Structures	New Jersey Section 1991 Annual Conference, AWWA, Atlantic City, New Jersey
1994	Conservation Impact on Water Rates	New England NAWC and New England AWWA, Sturbridge, Massachusetts
1996	Utility Regulation - 21st Century	NAWC Annual Meeting, Orlando, Florida
1997	Current Status Drinking Water State Revolving Fund	NAWC Annual Meeting, San Diego, California
1998	Small Water Companies - Problems and Solutions	NAWC Annual Meeting, Indianapolis, Indiana
1998	Basic Rate Regulation Seminar	New England Chapter - NAWC, Rockport, Maine
2000	Developer Related Water and Sewer Utilities Seminar	Florida State University, Orlando, Florida
2001	Developer Related Water and Sewer Utilities Seminar	Florida State University, Orlando, Florida
2002	Regulatory Cooperation - Small Company Education	New England Chapter - NAWC, Annual Meeting
2003	Developer Related Water and Sewer Utilities Seminar	University of Florida, Orlando, Florida
2004	Basic Regulation & Rate Setting Training Seminar	Office of Regulatory Staff, Columbia, South Carolina
2005	Municipal Water Rates	Nassau-Suffolk Water Commissioners Association, Franklin Square, New York
2005	Innovations in Rate Setting and Procedures	NAWC New York Chapter, West Point, New York

Papers and Presentations By John F. Guastella

Year	Title	Forum
2006	Basics of Rate Setting	The Connecticut Water Company, Clinton, Connecticut
2006	Innovations in Rate Setting and Procedures	NAWC New York Chapter, Catskill, New York
2006	Best Practices as Regulatory Policy	NAWC New England Chapter, Ogunquit, Maine
2006	Rate and Valuation Seminar	NAWC New York Chapter
2006	Full Cost Pricing	U.S. Environmental Protection Agency Expert Workshop, Lansing, Michigan
2006	Innovations in Rate Setting	NAWC New England Chapter, Portsmouth, New Hampshire
2007	Weather Sensitive Customer Demands	NAWC Water Utility Executive Council, Half Moon Bay, California
2007	Basics of Rate Setting and Valuation Seminar	NAWC New England Chapter, Ogunquit, Maine
2007	Small Company Characteristics	National Drinking Water Symposium, La Jolla, California
2013	Rate and Valuation Seminar	NAWC New York Chapter
2015	Rate and Valuation Seminar	NAWC New England Chapter

PROFESSIONAL QUALIFICATIONS AND EXPERIENCE of GARY C. WHITE

B.S., Business Administration, Accounting, Valparaiso University, 1972

Member: American Water Works Association

Over his professional career, Mr. White has been involved in various aspects of business management, accounting and finance. Since 1984, his experience has been in the area of utility management and rate regulation for water and wastewater systems. During this period he was responsible for the rate regulation department of the largest privately-owned water and wastewater utility in Florida, managed an investor-owned utility in upstate New York, and has been employed as a utility consultant.

Mr. White has extensive experience in utility ratemaking. He has prepared numerous rate studies providing cost of service and revenue requirement analyses for water and wastewater systems. He has performed cost allocation and bulk service analyses; revenue requirement forecasts; population growth and system capacity projections; and various plant operation and resource management evaluations. He has had experience with privately-owned and municipal utility systems. He also served as an instructor at a seminar for developer related water and sewer utilities, conducted by Florida State University and the University of Florida.

Mr. White has presented testimony in Connecticut, Florida, New Jersey, New York and South Carolina. He has qualified as an expert witness before several municipal regulatory agencies in the state of Florida, the New York Public Service Commission, Connecticut Department of Public Utilities Control, New Jersey Board of Public Utilities and the South Carolina Public Service Commission. He has appeared at both regulatory and municipal hearings representing investor-owned utilities on matters of ratemaking, regulation, rate design, finance, and utility management. Mr. White has also been active as a speaker on these subjects for community organizations and civic organizations.

Resume: GCW

Gary C. White List of Proceedings in which Expert Testimony was Presented

Year	Client	State
1985	General Development Utilities, Inc Port Charlotte	Florida
1986	General Development Utilities, Inc Silver Spring Shores	Florida
1986	General Development Utilities, Inc Port LeBelle	Florida
1987	General Development Utilities, Inc Sebastian Cove	Florida
1987	General Development Utilities, Inc Port Charlotte	Florida
1988	General Development Utilities, Inc Port St. Lucie	Florida
1988	General Development Utilities, Inc North Port	Florida
1989	General Development Utilities, Inc Port Malabar	Florida
1991	Country Knolls Water Works, Inc.	New York
1994	Environmental Disposal Corp.	New Jersey
1995	Environmental Disposal Corp.	New Jersey
1995	Hobe Sound Water Co.	Florida
1995	Heritage Hills Sewerage Works	New York
1996	Pen Pac Waste Disposal Co.	New Jersey
1996	Connecticut American Water Co.	Connecticut
1997	Crestwood Village Water Company	New York
1997	Pen Pac Waste Disposal Co.	New Jersey
1997	Hobe Sound Water Co.	Florida
1999	Environmental Disposal Corp.	New Jersey
2000	Placid Lakes Utilities, Inc.	Florida
2002	Kiawah Island Utility, Inc.	South Carolina
2003	Heritage Hills Water Works	New York
2004	Environmental Disposal Corp.	New Jersey
2004	Aquarion Water Co.	Connecticut
2005	Haig Point Utilities, Inc.	South Carolina
2011	Kiawah Island Utility, Inc.	South Carolina
2012 2014	Daufuskie Island Utility Company Heritage Village - PURA Docket No. 14-11-07	South Carolina Connecticut
2015	Daufuskie Island Utility Company – PSC Docket No. 2014-346-WS	South Carolina
2015	Housatonic Water Works Company	Massachusetts
2017	Milford Water Company – D.P.U. M-107 Hutchinson Water Company, LLC D.P.U. 18-156	Massachusetts Massachusetts
2018	nuichnison water Company, LLC D.F.U. 16-130	iviassaciiusetts